

COATING FILM THICKNESS STABILIZING SYSTEM FOR SPIN COATER

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Abstract

PURPOSE: To make it possible to obtain always a constant film thickness of a resist by a method wherein the title system is provided with individual sensors for measuring an environmental temperature, an environmental moisture, the temperature of a wafer and the temperature of the coating fluid and a controller for controlling the number of rotations of a spin coater according to the deviation of measurement of more than one sensors from the prescribed values of the temperatures and the moisture.

CONSTITUTION: The respective reference values of an environmental temperature, an environmental moisture, the temperature of a wafer 1 and the temperature of a resist 30 are set and the reference numbers of rotations of a rotating axis 12 to these reference values are set and are stored in a controller 20. Here, the environmental temperature, the environmental moisture, the temperature of the wafer 1 and the temperature of the coating liquid 30 are measured by individual sensors 21 to 23. In the case the individual temperatures and the moisture are changed from the respective reference values, the controller 20 decides the number of rotations of a spin coater on the basis of previously inputted information so that the film thickness of the resist 30 becomes a constant thickness and the number of rotation is fed back to the spin motor 20. Thereby, the constant film thickness of the coating film can be always obtained.

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